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## (54) DISCHARGE LAMP LIGHTING DEVICE AND LIGHTING SYSTEM

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a discharge lamp lighting device having a high power factor and capable of lowering the harmonic distortion, and a lighting system using

this discharge lamp lighting device.

SOLUTION: A series circuit 3 formed of a first and a second capacitors and an alternating current input terminal 4 of a fullwave rectifier 4 are connected to a rear stage of a noise filter 2, and a smoothing means 5 is connected to a direct current output terminal 4c of the full-wave rectifier 4. A smoothing direct current voltage is applied to a first and a second switching means so that the high frequency generated in the first and the second switching means operates a load circuit provided with a discharge lamp, a current-limiting inductance connected in series to the discharge lamp, and a third capacitor connected in series to the current-limiting inductance so as to form a series resonance circuit with respect to high frequency. A connection point of the first and the second capacitors and the load circuit 7 are connected to each other through a highfrequency current passage 8, and at least one of the first and the second switching means and the load circuit are formed, and a fourth capacitor 9' which forms a series resonance circuit with the current limiting inductance is provided.

